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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)
)
Amendment of Part 95 of the)
Commission's Rules to allow)
Interactive Video and Data)
Service licensees to provide)
mobile service to subscribers)

WT Docket No. 95-47
RM-8476

To: The Commission

DOCKET FILE COPY ORIGINAL

COMMENTS OF SEA INC.

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June 26, 1995

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SUMMARY

The Commission in this proceeding considers modifications to the interactive Video and Data Service (IVDS) rules. Specifically proposed is the concept of introducing ancillary mobile operations with a 100 mW ERP power limit. SEA supports this concept in general and herein discusses its position.

SEA supports the 100 mW ERP power limit proposed for mobile response transmitter units (RTUs). We do not, however, agree with the Commission's assertion that this power limit should be applied to fixed RTU operations as well. SEA recommends that the Commission avoid creating new rules which reduce the flexibility of this new service.

SEA urges the Commission not to adopt rule modifications that cater too specifically to a single radio system architecture or application. In this regard, SEA describes its vision of the future for the IVDS band.

SEA recommends that the Commission relax the "five second rule" for RTUs on the ground that the five second rule is unnecessary for most markets in the U.S. and Puerto Rico.

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COMMENTS OF SEA INC.

SEA, Inc. ("SEA") hereby files its comments in response to the FCC's Notice of Proposed Rule Making ("Notice") in the above captioned proceeding.^{1/}

SEA Inc., a wholly-owned subsidiary of Datamarine International, Inc., is a manufacturer of narrowband land mobile radio equipment. SEA has submitted comments in numerous rulemaking proceedings affecting land mobile and marine radio users. For over a decade, SEA has been involved in the development of narrowband technology at the technological and regulatory levels. SEA manufactures and sells narrowband linear modulation radio equipment used in voice and data operations in 5 kHz wide channels on 220 MHz Land Mobile Radio frequencies. SEA currently is delivering type accepted narrowband products for the new 220-222 MHz frequency band, and recently filed a type acceptance application for the world's first 220-222 MHz handheld

^{1/} Notice of Proposed Rule Making, WT Docket No. 95-47, May 5, 1995.

portable, the SEA700.^{2/} SEA is also shipping type accepted products for the IVDS band.

SEA's experience in pioneering systems and products for the VHF frequency bands perhaps makes the company uniquely qualified to discuss the introduction of new technology into a new radio service.

DISCUSSION

Mobile operation

SEA supports the basic proposal to permit ancillary operation of itinerant, low power mobiles in the IVDS band. We are concerned, however, about the original premise for such operation presented in the EON proposal.

EON's vision requires an extensive and prohibitively expensive system infrastructure, utilizing a cellular-like architecture with remote receivers. While the potential applications described by EON in its petition include many which are consistent with the original intent of IVDS, they also overlap heavily with those to be offered by the imminent PCS. This approach, therefore, asks IVDS operators and licensees to perform an expensive build out and then compete with PCS. IVDS operators and licensees may not wish to embark on such a path. We ask that the Commission not establish new rules which force either or both

^{2/} SEA believes its handheld portable for the 220-222 MHz band will serve as the basis for a mobile transceiver for the IVDS service.

IVDS operators in each market into the construction of a system type which requires such a high financial risk. Based on SEA's extensive mobile and fixed data experience and discussions with many of IVDS licensees, SEA visualizes much potential for the IVDS service becoming a commercial data communications band rather than a consumer-oriented television interactivity medium. The myriad of wireless data gathering and transfer applications, and lack of spectrum to implement them, justifies this vision. The technology developed for and the capital invested on true interactive video services (wireline, fiber, CD-ROM and hybrid) and emerging Personal Communication Services should discourage one from trying to turn IVDS into a competitor to these enterprises.

The grandiose mobile subscriber applications presented by EON in its Petition are all features that are built into PCS operations. It would be misleading of the Commission to adopt rules permitting low power itinerant mobile operation and simply pointing to the applications proposed by EON. Such action could be misconstrued by licensees as an actual endorsement of a specific vendor's set of applications, in effect encouraging them to pursue a high risk and expensive enterprise. Indeed, the Commission should be cautious in leaning too heavily on EON's ideas to make this band look like something it cannot become. SEA, however, feels that 100 mW mobile operation can be developed

into many useful applications for wireless data communications providers.

The current rules permit a variety of approaches to the use of this spectrum. Licensees have the ability to divide up their licensed spectrum into 5 kHz channels and to therefore offer 100 dedicated channels to their customers. This approach offers tremendous flexibility in offering a variety of services, including those that will benefit from ancillary mobile operations. Applications such as automatic teller machine linking, and home security and utility monitoring can now be augmented by personal security and point-of-sale applications.

The Commission should consider this alternative vision for the use of IVDS when crafting rule changes. The way to make this new service (and the enterprises developed by the new licensees) a success is to adopt rules which permit greater flexibility in the band's use. Of particular concern to SEA is the creation of new rules which compel licensees to spend excessive capital on highly speculative and risky ventures. With regards to this issue, SEA has spoken to many licensees who are convinced that a microcellular system approach is not a viable business strategy for this band.

100 mW ERP power limit for itinerant mobiles

We support the 100 mW ERP maximum limit for itinerant mobiles but we also strongly support retaining the 20W maximum for fixed RTUs.

The FCC asks^{3/} if there is a "need to continue to authorize 20 watts power for fixed RTUs, given their apparent ability to operate at 100 milliwatts." 20 W should, indeed, still be permitted for fixed RTU operation because to reduce the maximum to 100mW would require all systems operating in the IVDS to be of the same cellular architecture as that promoted by EON. Those applicants who previously were granted licenses through either the lottery or auction process entered the IVDS enterprise with the understanding that this is a 20 W ERP maximum service. To reduce the maximum power at this juncture not only has no merit but would be unfair to these new licensees because they would be forced into an expensive microcellular system structure. The 20W limit permits the licensee/operator to increase the complexity of their system (and lower the RTU power) as the user base grows and as they can afford it, rather than having to do so because of a new regulation.

^{3/} See Notice at ¶ 8.

Retaining the 20W ERP maximum for fixed RTUs will not worsen the interference scenario beyond that originally adopted by the Commission and endorsed by MSTV.

Five second rule

SEA proposes relaxing the five second rule^{4/} in channel 13 markets and eliminating it in non-channel 13 markets.

The rules as they exist today state that "(t)he maximum duty cycle of each RTU shall not exceed 5 seconds per hour, or, alternatively, not exceed one percent within any 100 millisecond interval." Were the rules to be modified as proposed, they would specify that the five second rule applies to each fixed or mobile RTU, not each subscriber^{5/}. Therefore a subscriber could conceivably have multiple, albeit low power, RTUs to increase his allowable transmission time per hour. If it is apparent that a potentially unlimited number of 100 mW itinerant mobiles will not cause significant interference to channel 13 reception, then it would appear that the five second rule is not necessary for 100 mW transmitters. Accordingly, we recommend that units which are limited to 100 mW be authorized for unlimited transmission time.

^{4/} 47 CFR ¶ 95.863.

^{5/} See Notice at ¶ 9.

It is SEA's contention that non-channel 13 markets don't need a five second rule at all. There are to be two IVDS licenses granted for each of the 734 markets in the U.S. and Puerto Rico.^{6/} There are only 67 channel 13 transmitters in the same areas,^{7/} accounting for a mere 9.1% overlap of IVDS and channel 13 markets. It is clearly unnecessary for the five second rule to apply to all markets nationwide. SEA recommends that the five second rule be eliminated for RTUs which operate outside TV channel 13 Grade B plus five mile service areas.

CONCLUSION

For the foregoing reasons, SEA urges the Commission to adopt the aforementioned rule changes for the Interactive Video and Data Services, which will best serve the public interest. SEA's proposals and comments contained herein reflect our views on what constitutes a flexible approach to IVDS while minimizing risks to licensees. When coupled with the technical parameters we

^{6/} 306 MSAs and 428 RSAs.

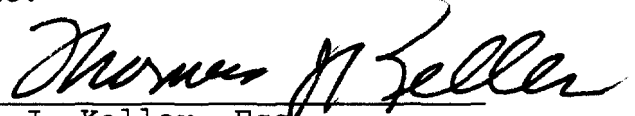
^{7/} According to the current issue of the TV and Cable Fact Book, there are 72 allocations for channel 13 in the U.S. and Puerto Rico. Five of these allocations are not in use.

propose, the Commission's proposed rule changes will achieve greater flexibility and the impetus for growth in the Interactive Video and Data Services.

Respectfully submitted,

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Dated: June 26, 1995

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this 26th day of June, 1995, caused copies of the foregoing "Comments" to be served by first class mail, postage prepaid to the following:

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